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REMARKS

Pending Claims:

Claims 1-3, 6-8, 10-11, 15-17 and 23-26 were pending. By the present reply, Claim 25 is withdrawn, and Claims 41-45 are added. Support for Claim 41 can be found for example at page 9, line 27; support for Claim 42 can be found at page 9, line 25; support for Claim 43 can be found at page 17, line 28; and support for Claims 44-46 can be found at page 22, lines 8-11. Thus, Claims 1-3, 6-8, 15-17, 23-24, 26, as amended, and new Claims 41-45 are now pending.

Claim rejections:

(i) Claims 1-3, 6, 11 and 23-26 are rejected under 35 U.S.C. 103 (a) as being unpatentable over U.S. Patent No. 5,389,096 ("Aita"), in view of U.S. Patent No. 5,902,289 Swartz ("Swartz") and U.S. Patent No. 5,431,649 ("Mulier"). In this rejection of the claims, Aita is cited as disclosing a laser catheter for performing PMR procedures, but fails to teach the use of electrosurgical energy. Swartz however is cited for teaching use of either laser or RF energy for ablating cardiac tissue, but Swartz fails to teach use of a conductive fluid to enhance the procedure. However, Mulier is cited for disclosing a cardiac ablation catheter that includes RF electrodes for ablating tissue, and for teaching the specific advantage of providing conductive fluid to tissue to advance ablation. Thus, according to this rejection, it would have been obvious to provide Aita with an RF catheter for performing TMR procedures based on Swartz, and also to provide the conductive solution based on Mulier.

As set forth below, Claim 1 is amended to define a method not disclosed nor suggested by the cited references.

(ii) Claim 7 is rejected under 35 U.S.C. 103 (a) as being unpatentable over Aita, Swartz, and Mulier as applied above, and further in view of U.S. Patent no. 5,125,924 ("Rudko"). In this rejecting Claim 7, both Swartz and Aita were acknowledged as failing to disclose firing ablative energy in concert with a monitored EKG cycle. However, Rudko was cited for teaching that it is advantageous to monitor the EKG activity and synchronize the delivery of ablative energy with specific intervals of the EKG cycle to safely treat heart tissue. Thus, according to the Office Action it would have been obvious to in view of Rudko to provide the Aita system as modified

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by Swartz and Mulier with a means to synchronize the delivery of ablative energy during calm periods of the heart beat cycle to more accurately deliver the ablative energy.

In view of amended Claim 1 and as set forth below, it is believed that Claim 7 is patentable over Aita, Swartz, and Mulier, further in view of Rudko.

(iii) Claims 1-3, 6-8, 10-11, 15-17 and 23-27 are rejected under the judicially created doctrine of obviousness-type double patenting in view of: Claims 1-31 of U.S. Patent no. 5,873,855; Claims 1-32 of U.S. Patent no. 5,683,366; Claims 1-104 of U.S. Patent no. 5,697,281, Claims 1-56 of U.S. Patent no. 5,697,882; Claims 1-11 of U.S. Patent no. 6,032,674, and co-pending U.S. Patent Application no. 09/054,660.

In response to this rejection, the Applicants will file a terminal disclaimer in compliance with 37 CFR1.321(c) if this rejection remains the present claims have been reconsidered.

Response to the claim rejections:

Re. Rejection of Claims 1-3, 6, 11 and 23-26 under 35 U.S.C. §103 (a)

Claim 1 is amended to include the steps of contacting the active electrode with an electrically conducting fluid disposed in a space between the active electrode and the target site; inducing discharge of energetic electrons and photons from the conducting fluid by applying a sufficient high-frequency voltage between the active electrode and a return electrode; and directing the energetic electrons and photons to ablate tissue at the heart wall to form a revascularizing channel through at least a portion of the heart wall as described, for example at page 20, line 10 to page 21, line 14 of the specification.

Thus as amended Claim 1 is not disclosed or suggested by any of Aita, Swartz or Mulier (singly or in any combination) because:

- (i) Aita, pertaining to laser procedures, does not require or teach the use of a conducting fluid;
- (ii) Swartz, involving methods and procedures that require contacting the electrode directly with tissue, does not teach or suggest the use of an electrically conducting fluid in a space between the electrode and the target tissue, and

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(iii) none of Aita, Swartz or Mulier teach nor suggest inducing discharge of energetic electrons and photons from the conducting fluid by applying a sufficient high-frequency voltage between the active electrode and a return electrode as set forth in the claims, and a discussed for example at page 20, line 10 to page 21, line 10 of the specification.

Accordingly, in view of distinction of amended Claim 1 over the cited references, therefore dependent Claims 2-3, 6-8, 10-11, 15-17, 23-24, 26 and 41-46 are also not rendered unpatentable by the cited references. Accordingly, the present claims are allowable, which allowance is respectfully requested.

Re. Rejection of Claim 7 under 35 U.S.C. §103 (a)

For the reasons set forth above, Claim 7 is not rendered unpatentable by the cited references.

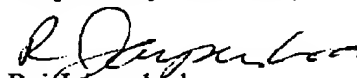
Re. The Non-Statutory Double Patenting rejection of the Claims

The Applicants herewith file a timely terminal disclaimer in compliance with 37 CFR 1.321 (c) in view of the cited patents and patent application.

CONCLUSION

It is believed that claims herein and the Application are in condition for allowance. Accordingly, reconsideration and allowance of the Application is respectfully requested. If an issue remains that can be resolved by telephone, kindly contact the undersigned at (408) 735-6486.

Respectfully submitted,



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